ENTER LISA ... Now the future can begin!

From pages 51-53, by Derek Meakin and Peter Brameld.

LISA has arrived. And its the biggest breakthrough in microcomputing since the first hand-built Apple emerged from a California garage in 1976.

That pioneering machine was the blueprint from which a all the hundreds of different micros produced since have been based.

But now there's Lisa, so revolutionary a concept that it's no exaggeration to say that the future of personal computing has only just begun.

The result of the many millions of dollars and hundreds of man years (Reportedly 50$ Million, and 200 man years - RTK) that Apple has been devoting to research and development is a giant leap forward in making computers far more human.

Lisa is the friendliest micro ever. The average non-user needs only 20 minutes to understand how to get it busily underway doing all the routine office tasks like writing reports, carrying out financial planning, scheduling projects, drawing graphs.

And when the boss is ready to go home, it takes it upon itself - without human intervention - to tidy up and put everything it has been working on back into its respective files until work starts again the next day.

The secret of Lisa lies not so much in its processing power, but in its phenomenal 2Mbyte operating system - which is 200 times larger than the Apple]['s.

Not so much its appearance - it's smart and well-designed, but in no way radical in shape - but the magic it can conjour up on its screen.

That screen is the electronic equivalent of an office desktop. As in a well-managed office, at the start of the day it is neat and tidy.

The calculator is vital in the office, and it should always be at hand. So it is with Lisa. It's there on the left, ready to use at any time, just below the digital clock and calendar (which, incidentally, only goes up to 1995! - RTK).

On the right is a clipboard, on which you can store anything you are working on. There's also a filing cabinet, in which are folders containing all the jobs you may need to work on.

And at the bottom is a waste basket, where you can throw things away when you no longer need them.

Every need can be accessed by pointing to a little picture symbol on the screen.

You do this by using a "mouse" - a square block of plastic that sits on your real desk alongside Lisa. By sliding it in any direction, a tiny arrow moves around the screen.

Say you want to start a new job. Go to the filing cabinet and you find that in addition to various folders, it contains packs of paper - graph paper, ruled paper, plain paper. Tear off the sheet you need, and get the job under way.

As your day's work progresses you are quite likely to find that your desk is getting rather cluttered. A spreadsheet of financial accounts is partly obscuring your ever-present calculator. Alongside that is part of a mailing list, or a letter that you haven't quite finished.

As in a normal office, you might have to break off a job to do something that has suddenly become more urgent. That's no problem with Lisa. You don't have to put your present disk away, find another program disk, boot it...

In fact the word program no longer exists as far as Lisa is concerned. Apple researchers say that one of the major problems of introducing a computer into the office is the language used to describe the different functions. The average office worker, say, does not understand computer buzzwords. So programs are simply called "office tools".

The six principal built-in applications are LisaProject (for scheduling jobs), LisaCalc (for financial planning without

Source: UK magazine

the complicated coding required by conventional spreadsheets like VisiCalc), LisaWrite (for preparing reports and correspondance), LisaList (information management), LisaGraph (for creating business graphics), and LisaDraw (for setting up presentations).

Apple say that using Lisa it is as easy to work with pictures as with words. Complicated drawings can be produced with a wide choice of shadings. Six typestyles can be used for text, in any size you want, and displayed in shadow, outline, italic, bold or underlined.

When you are drawing you can make a ruler materialise alongside the edges of the paper, so you know exactly where your work will be positioned.

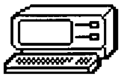
Using just the mouse and keyboard you can design a company letterhead, complete with logo, type in your letter, add your signature and send it to the printer. Making sure, of course, that you save your letterhead and signature in the filing cabinet for instant use in the future.

Even using the keyboard provided for the UK you can still type letters in other languages, using correctly accented characters. The daisywheel printer supplied with the Lisa has a 130-character wheel - the largest currently in production - so it can easily cope with the additional characters.

As Lisa is designed for business use it does not have any colour facility. A black-and-white monitor and two double-sided disc drives, each with a capacity of 861K, are built in. Also incorporated into the system is the Profile hard disc drive already used with the Apple ///. This stores the operating system, which is 2 Mbytes in size, along with user data.

The keyboard is typist quality with a seperate numeric keypad. It has full cursor control keys with auto-repeat facility and is detachable from the main computer cabinet, enabling it to be positioned at the user's convenience.

Lisa is a 16-bit computer using the Motorola 68000 processor. It has 1 Mbyte of RAM, which is shared between the operating system and the user in a similar manner to the Apple ///.



There any similarity between this and any other Apple product ends.

The 1 Mbyte of RAM is divided between two motherboards, resulting in a modular construction which improves reliability and leads to easy servicing. Convection cooling is used. Clever design of ventilation renders a fan unnecessary.

On board I/O facilities include two RS-232 ports and one parallel port. However, the Profile uses the parallel port and the printer requires a card to be placed in one of the three I/O slots.

As Lisa cards offer multi-port facilities the provision of three slots is not a limitation.

Those greedy for more memory are doomed to be disappointed. At 1 Mbyte, Lisa's memory is fully expanded.

Your view into the world of Lisa is through a 32K bit-mapped screen display. This gives a mixed text and graphics display which has to be seen to be believed.

The standard green, amber or black display of most computers has no place here. If you are writing a letter the area of the screen which represents the piece of paper on which the letter is being written is white and the print is black. Just as if you were using a typewriter.

This rather simple description hardly does it justice. You can almost feel the texture and quality of the paper.

The LisaCalc display looks just like a real-life accounts schedule. Because the display is bit-mapped, resolution takes on an entirely new meaning.

Any item on the screen may be changed in size or position, and a multitude of items may be displayed simultaneously. This feature has particular significance when you remember that what you see on the screen is exactly what you get on the printer. Hard copy for once means just what it says.

One revolutionary feature of the Lisa concept is that the use of the keyboard is minimal, except for purposes like word processing and the entering of original data you want Lisa to work with.

For up to 80 percent of your work with Lisa you don't use the keyboard - you use the mouse. It's about the size of a packet of paper clips. Place your hand on it and move it in any direction you want over the surface of your desk.

This movement controls an arrow on Lisa's screen which is used to select or carry out the operations currently in hand from a variety of options.

When the arrow rests over the required area of the screen a single button on the top of the mouse is pressed, instructing Lisa to carry out the command of your choice. If it requires further clarification it will politely ask you.

And if you do happen to make a mistake at any stage you won't see any SYNTAX ERRORs or Applesoft prompts on the screen. Instead Lisa has a variety of symbols available to alert you to the problem - and tell you what to do.

Lisa can still be used as a normal computer, in so far as you can program it yourself, and languages available when the machine is launched in the summer will be Pascal, BASIC and COBOL. System monitor and assembler are also incorporated. But there is no CP/M or MP/M capability. Plans are also being made for the Apple /// and][to be linked on an office network.

Floppy disc access time is said to be up to eight times faster than previous Apple floppy drives. However, whilst it is child's play to switch from one application to another, movement between some of the modules on the machine we used for the Windfall test seemed to be slow compared to the rapid manipulation of data once it was on the screen.

However we were told this was only because of the heavy debugging and fault tracing equipment temporarily connected to the pre-release machine

The original Apple][was the equivalent of 2 man-years of development. The Apple /// required 25 man-years. And in Lisa Apple has invested a staggering 200 man-years of development time.

The result is a significant breakthrough in revolutionising the office environment and making advanced computer technology available to the individual.

Lisa is very clearly pointing the way to the office of the future. And while it does a lot today that could never be done before, it will be doing a lot, lot more tomorrow.

Software houses in Britain and the US are already hard at work planning to expand Lisa's capabilities in even more exciting ways. While Lisa already copes admirably with routine office tasks, new and highly specialised application areas are now being developed, providing companies with even more advanced tools to be accessed by that remarkable mouse.

Lisa Specifications Box

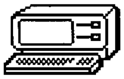
16 bit machine using the Motorola 68000 processor. 1 mbyte RAM (two 512K boards). 32K bit-mapped screen display. Two built in double-sided double-density disc 5.25in disc drives (861K each). Built in back and white monitor Mouse pointing device for cursor control. Two RS232 serial ports. One parallel port. Three interface slots. 5mbyte Profile hard disc used for operating system software and user data, connected via parallel port. 2mbyte software based operating system incorporating scheduling, financial planning, information management, report and correspondence writing, business graphics and drawing capabilities (can switch between functions at will). Convection cooled. Package includes sophisticated printer capable of producing mixed graphics and text copy.

A key to open people's minds..

Apple led the hardware revolution of the late '70s. Now, with Lisa, it is pioneering again - spearheading the software revolution of the '80s.

Lisa is designed as a completely new kind of personal computer, intended for the millions of managers, administrators, secretaries and professionals in medium to large organisations world wide.

Source: UK magazine



Apple forecast they are moving into an untapped market for the personal computer, aimed at the individual who daily creates, transfers, analyses and stores information in all its forms - text, numeric, and graphic.

Today's micros require the user to familiarise themselves with computer techniques and adapt to the one-task-at-a-time limitations of the machine. Lisa intends to change all that - to accomodate to the way people deal with typical tasks and manipulate various forms of information.

While Apple /// is an evolutionary version of the Apple][, Lisa is revolutionary - the first genuine personal office system.

As Apple UK's managing director Peter Cobb puts it: "We have been redefining the marketplace. Many business people still think of the personal computer as something to play Space Invaders on. We want to change that attitude."

"This is where Lisa comes in, because it makes personal computing so much easier. It is the key that will open people's minds as to what computers can really do."

Sales and marketing director Keith Hall said; "We want the office worker to reach for Lisa just as easily as he now reaches for his calculator or his telephone. It gives us a tremendous opportunity to develop a completely new market."

And Brian Reynolds, who will be responsible for Lisa sales in the UK, added: "This heralds the second wave of micros - a wave that will make personal computing understandable to millions of people.

"We can only do this by creating a system that is incredibly easy to use - in many ways to work as a human works. That is what Lisa does." Layout and design by Rob Bedeaux Copyright © 1998 All texts copyright by owners

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http://www.asap.net/~rbedeaux/lisa/docs.html
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